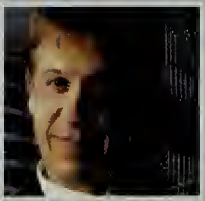
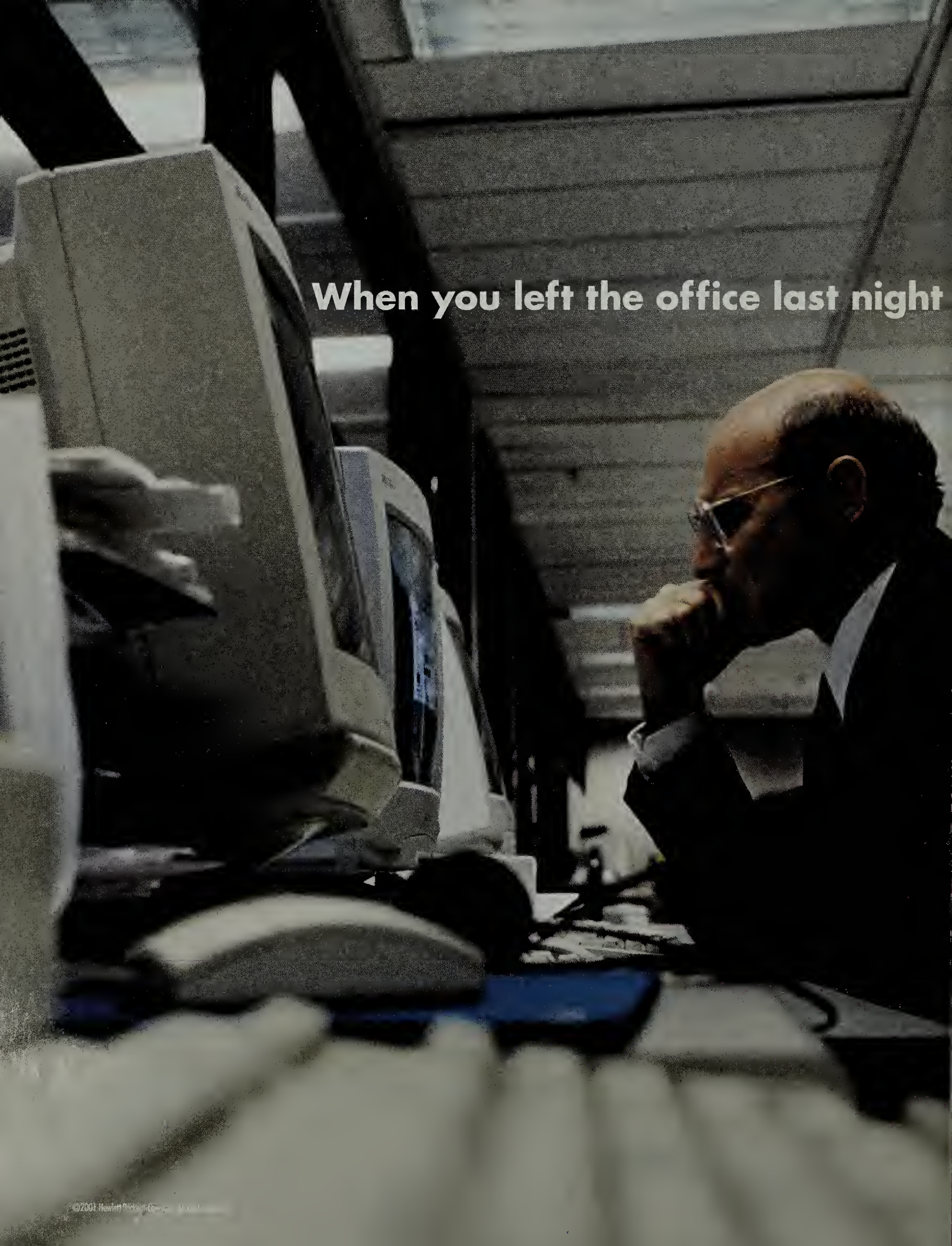
COMPUTERWORLD PREMIER 100
IT LEADERS 2002

BEST In Class



MARCH 11, 2002


When you left the office last night

©2001 Hewlett-Packard Co [illegible]

you worked for a Midwest-based enterprise humming nicely along with ten accounts. When you walked in this morning, you were greeted by an e-mail announcing that you just landed a new piece of business—which happens to be bigger than those same ten accounts combined.

What's at the top of today's to-do list? Figure out how to expand your supply chain and create distribution channels to service all of your client's retail locations around the world. And could you do it by tomorrow, thank you?

Hopefully, you've got an infrastructure that's built on technology that works around *your* needs, not the other way around. It should be standards-based, so you're limiting your risk. Adaptable, so you can quickly adjust to change. Reliable, so you're up and running without a hitch.

At HP, we engineer infrastructure that starts with you—your business, your issues, your opportunities. So you can easily respond as your business expands, contracts or takes off in new directions.

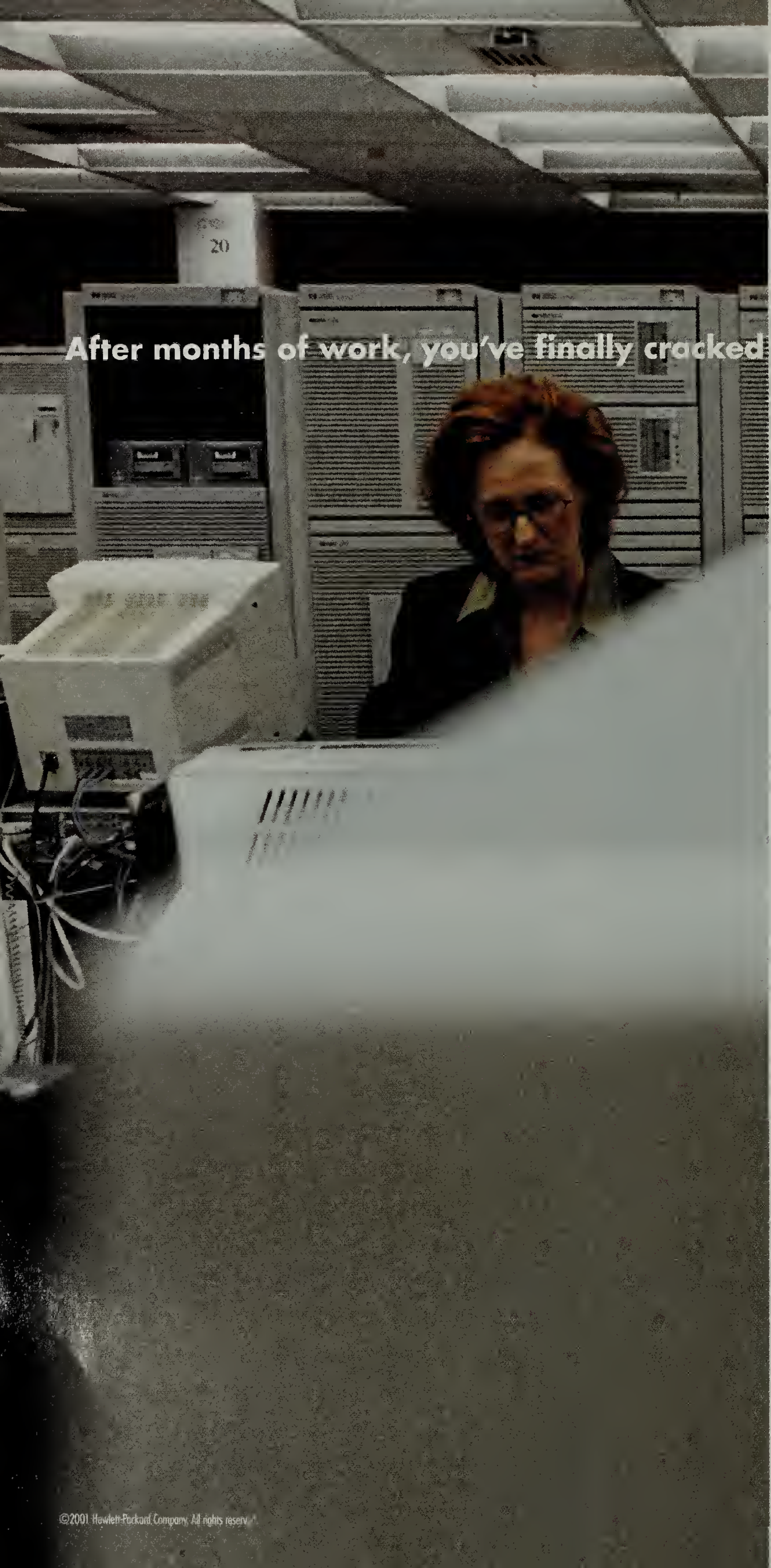
Servers that are designed to address the critical nature of an always-on Internet infrastructure. Software that puts your entire network within easy reach of your keyboard. Storage that enables you to transparently scale your capacity. Service professionals to help you quickly design and deploy flexible solutions and infrastructures. As well as the support resources to help keep them running 24/7.

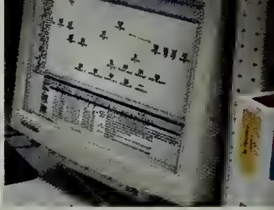
HP infrastructure solutions are based in the real world of business. Because the last time we checked, that's where we all work.

Call 1.800.HPASKME, ext. 246. Or visit www.hp.com/go/infrastructure.

Infrastructure: it starts with you.

hp®
invent





After months of work, you've finally cracked the consolidation of your three data centers into one, when word comes down that you are about to buy your largest overseas distributor, adding two more data centers to the already complex equation. Okay, now what?

In order to stay competitive in an environment like this, you have to be able to react quickly and decisively in the face of sudden change. It would help if your infrastructure were open, resilient and manageable enough to adapt when you need it to. And the only way that's possible is if the infrastructure is built to work around *your* needs, not the other way around.

HP OpenView—our multi-platform management software—puts control of your entire infrastructure within easy reach of your keyboard. You can then visualize and monitor your infrastructure, from legacy systems to storage to Internet services, all from one central location. Helping you preempt problems before they occur, cost-effectively maintain high service levels and protect revenue streams.

HP infrastructure solutions—servers, software, storage, services and beyond—are engineered for the real world of business. Because the last time we checked, that's where we all work. Call 1.800.HPASKME, ext. 246. Or visit www.hp.com/go/infrastructure.

Infrastructure: it starts with you.

invent

©2001 Hewlett-Packard Company. All rights reserved.

EDITOR IN CHIEF
Maryfran Johnson

EDITOR
Ellen Fanning

ART DIRECTOR
Julie D'Errico

MANAGING EDITOR
Jamie Eckle

RESEARCHER
Allison Wright

WRITERS
Julekha Dash, Kevin Fogarty, Michael Meehan, Kathleen Melymuka, Linda Rosencrance, Mathew Schwartz, Carol Sliwa, Marc L. Songini, Jaikumar Vijayan, Todd R. Weiss

COPY EDITORS
Jean Consilvio, Jacqueline Day, Eugene Demaître, Michele Lee, Michael Parent, Bob Rawson, Monica Sambataro

BEST IN CLASS REVIEW PANEL
Jim Jones, managing director, The Information Management Forum;
Charlie Feld, founder, CEO and president, The Feld Group;
Priscilla Tate, executive director, Technology Managers Forum;
Thornton A. May, chief psychographer and futurist, Toffler Associates Inc.

VICE PRESIDENT/ MANUFACTURING OPERATIONS
Carolyn Medeiros

SENIOR GRAPHICS PRODUCTION COORDINATOR
Heidi Broadley

PRODUCTION MANAGER
Beverly Wolff

ADVERTISING COORDINATOR
Toula Karayan

EDITORIAL OFFICE
500 Old Connecticut Path
Framingham, Mass. 01701
(508) 879-0700

REPRINTS
To order reprints, please call Ray Trynovich at RMS Reprints, (717) 399-1900 or e-mail: sales@rmsreprints.com.

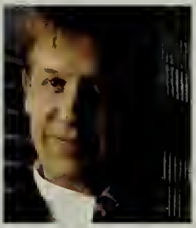
contents

6 Staples Inc. developed a system that lets customers consolidate their online and in-store purchases into one transaction.▸

Michael J. Ragunas

8 Burlington Coat Factory Warehouse Corp.'s unconventional choice of operating system paid off big-time.

9 State Street Corp. created a system that slices the number of trades that must be handled manually.

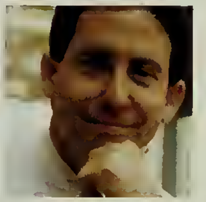

Malcolm C. Fields

◂**10** A new system at **HON Industries Inc.** increased scheduling accuracy at warehouses by 20%.

14 GFInet Inc. designed a system that allows for online trading of financial and commodity derivatives.

15 FedEx Corp. gave customers a Web-based guide to help them navigate the fast-paced world of international shipping.

16 Wesco Distribution Inc. developed a system to let its salespeople directly access the finished-goods inventory systems of its major suppliers.▸


Russ Lambert

18 Galactic Ltd. designed a way for its clients' employees to earn rewards for their money-saving ideas.

19 Corning Inc. turned the standard ERP model upside down by first listening to its operations people, and then picking a technology.

20 Lenox Inc. saw its sales skyrocket after embarking on a do-it-yourself Web site update.

EDITOR'S NOTE

Each year, *Computerworld* casts a spotlight on the individuals leading the IT industry today. We call this elite corps the Premier 100 IT Leaders.

When choosing these honorees, we look in particular for individuals using technology to solve critical business problems. And we're always intrigued with the projects these leaders dream up, sell to their executive boards and ultimately make happen. So this year, we decided to take a closer look at the most innovative of the projects, showcasing the companies and IT leaders that have shown that technology done right can deliver real business value -- the Premier 100 Best in Class awards.

To select the winners, *Computerworld* editors reviewed the most successful projects of our Premier 100 IT Leaders for 2002. We looked for projects that demonstrated measurable payback and that were strategically important to the business and customers. Once the field was narrowed to 25 finalists, a panel of industry experts reviewed the projects.

The panel consisted of Jim Jones, managing director of The Information Management Forum; Charlie Feld, founder, CEO and president of The Feld Group; Priscilla Tate, executive director at Technology Managers Forum; and Thornton A. May, chief psychographer and futurist at Toffler Associates Inc. From those judges' evaluations, we chose 10 Best in Class winners.

On the following pages, you'll find case studies of these winning projects describing the technology, business payback and lessons learned. We hope their stories will inspire your own innovative technology project.

– Ellen Fanning

Transactio
Ties Sales C

BY **CAROL SLIWA**

Project objective

Through in-store kiosks, Staples Inc. had already given shoppers the option of ordering merchandise from its Staples.com Web site and paying for it with their credit cards. The in-store access-point project involved making system changes to let those customers consolidate their Staples.com and in-store purchases into one transaction and pay with cash, check or credit card at the cash register.

As part of the project, Staples built a custom-configuration system that customers can use to design their own PCs at the in-store kiosks and on the Staples.com Web site.

The office supplies retailer also had to tweak the system so it could detect whether customers are using in-store kiosks so their orders can be held held until payment is received at the cash register.

Customers ordering merchandise at in-store kiosks print out a ticket with a bar code, which is scanned at the cash register. The cash register pulls the kiosk order information from the back-end order management system. The register then sends the payment information to the back-office system so that the order and payment can be joined.

The project was started in early 2000 and completed in the spring of last year. Staples made investments in software development, additional kiosks and site and network capacity to support volume.

Technology

Staples modified the Microsoft Corp. Commerce Server software powering its Staples.com site, its IBM AS/400-based custom-built order management system and its Windows NT-based point-of-sale (cash register) system, according to Michael J. Ragunas, chief technology officer at Staples.com. The IT department also had to build capabilities into its back-office systems to reconcile orders and payments and performed integration work to permit communication between systems that weren't previously connected, he says.

To enable customers to build their own PCs, Staples used a configuration tool from Calico Commerce Inc. in San Jose. The tool is based on San Jose-based BEA Systems Inc.'s

BEST IN CLASS

at a glance

COMPANY Staples Inc.

LOCATION Framingham, Mass.

WEB www.staples.com

PROJECT LEADER Michael J. Ragunas

BUSINESS Supplier of office products and services

ANNUAL SALES $10.7 billion

SIZE OF IT DEPARTMENT About 500

n Tool
hannels

CHRISTOPHER HARTING

WebLogic application server running on Windows NT.

Staples built an XML interface to enable the Calico tool to interact with Staples.com, which presents the information to customers via Microsoft's Active Server Pages. Completed orders are sent to the manufacturers via electronic data interchange from Staples' back-office systems.

Business benefits

When customers walk into any of Staples' more than 1,100 retail stores, they now have access not only to the 7,000 to 8,000 stocked items but also to the 50,000 offered through Staples.com. "We are offering a much broader assortment to customers in the stores," says Ragunas.

"The fact that you can consolidate your purchases and choose multiple ways to make purchases in the store puts them a level ahead at this point," said Geri Spieler, an analyst at Stamford, Conn.-based Gartner Inc.

Bottom-line payback

Staples has logged close to $4 million in sales per week on the kiosks and eliminated its inventory of PCs in more than 200 stores, Ragunas says. With the custom-configuration system, customers get exactly what they want and Staples has reduced its PC inventory costs and freed space for other products, he adds. Customers using Staples.com in stores are more likely to also order merchandise through the Web site from their homes or offices. "We know that customers who shop with us in multiple channels spend more with us overall — 2.5 times if two channels, 4.5 times if three," says Ragunas.

Lessons learned

"We've learned that integration is hard work," says Ragunas. "There are some technologies out there that can help, but it's still hard because most of what you're working with is legacy, and you have to figure out ways to make what you already have talk to each other." ◗

Burlington Coat Factory Warehouse Corp.

A Linux Installation Of Enterprise Proportions

BY TODD R. WEISS

Project objective

Burlington Coat Factory Warehouse Corp. needed a new operating system so its stores could deploy new applications and redeploy existing applications and services to take advantage of a Web-based architecture.

At the same time, the company wanted to reduce costs and capitalize on its long-standing success with Unix, says Michael Prince, vice president and CIO. After comparing Linux, Windows and Solaris, Burlington Coat Factory chose Red Hat Linux for use in more than 1,250 systems at 250 stores. The project was completed in 2000 in just over four months and showed the viability of Linux for widespread use across an enterprise, Prince says. The company also achieved its goal of setting up an infrastructure that allows the use of Web-based applications.

BEST IN CLASS

COMPANY Burlington Coat Factory Warehouse Corp.

LOCATION Burlington, N.J.

WEB www.coat.com

PROJECT LEADER Michael Prince

BUSINESS Discount retailer of coats, clothing, household goods and other consumer items

ANNUAL REVENUE $2.4 billion

SIZE OF IT DEPARTMENT About 120

Technology

The Linux boxes are desktops and servers, as well as stand-alone boxes for back-office functions like shipping, receiving and other order processing. Linux is now deployed on the back end at all Burlington Coat Factory stores. Because of the project's success so far, Linux will be deployed during the next few years on the front end in point-of-sale systems, says Prince.

Business benefits

Because the IT team had years of experience with Unix, the transition to Linux was a natural one, says Prince. "Linux is as much Unix as anything," he says. "A lot of our choice of Linux was really a choice of Unix over Windows. We had a technical team that was really comfortable with Linux."

And because the operating system is inexpensive, requires the purchase of only one copy and uses standard industry hardware, the risks were minimal. If the software didn't work as advertised, the company could have kept the hardware and bought another operating system, says Prince. Another benefit, he says, is that Linux environments typically have fewer virus and security problems than their counterparts, thus reducing support costs.

The move to Linux was an evolution for Burlington Coat Factory, says Dan Kusnetzky, an analyst at market research firm IDC in Framingham, Mass. The company was previously a poster child for SCO Unix, so the Linux installation was realistic and easy.

"This is one place where Linux is beginning to shine, in retail in a replicated environment," he says. "Burlington was one of the earliest examples, and we're seeing more of them now." Other retailers using Linux include Amazon.com Inc., The Home Depot Inc., Boscov's Department Stores and Lawson Inc. convenience stores in Japan.

Bottom-line payback

By choosing Linux over proprietary operating systems, costs were greatly reduced, says Prince. There were no high licensing fees, and remote administration is easier. "The concept of logging in to a remote system and running programs like you are [a local user] is the biggest win," Prince says. Another huge payback is reliability. "It's a very stable and efficient operating system. It doesn't crash," he says.

Lessons learned

Selling the project to upper management wasn't too difficult, says Prince. "The fact is, if Linux had required proprietary hardware that would not have been recyclable ... then it would have been a tough sell, given that at the time, no major retailer" had adopted the then-fledgling Linux, he says. ❯

Financial Manager Speeds Up Transactions

BY **KEVIN FOGARTY**

Project objective

Wall Street trading systems may seem high tech, but the back-end processes required to complete a trade are a lot murkier — and a lot lower tech — than you might think.

Many traders rely on service providers like State Street Corp. to do the accounting and settlement and financial transfers required to actually complete a sale. But they frequently notify those providers of a trade with a fax — often with critical information missing. In the past, State Street had to delay more than half the settlements so a staffer could confirm, by phone or fax, information missing from the original notice, says John A. Fiore, State Street's executive vice president and CIO. That much manual intervention was hugely expensive in an operation that makes up as much as two-thirds of State Street's total revenue stream.

BEST IN CLASS

COMPANY State Street Corp.

LOCATION Boston

WEB www.statestreet.com

PROJECT LEADER John A. Fiore

BUSINESS Provides financial services to investment managers, corporations, mutual fund companies, public pension funds, unions, nonprofit organizations and individuals

ANNUAL REVENUE $3.6 billion

SIZE OF IT DEPARTMENT 3,000 worldwide

The company's Financial Transaction Management (FTM) system now automatically processes more than 80% of the requests that flow through it by identifying the source of the fax and automatically filling in missing information from a database of information on traders. Fewer than half of all trades go through FTM at this point, but the system will be complete in the first quarter of next year.

Technology

The system was custom-coded in Java, using Oracle Corp. databases running on Sun Microsystems Inc. servers. It was tied to underlying processing systems on the mainframe using IBM's MQSeries message-oriented middleware for communication among applications.

Business benefits

FTM helps put State Street in the forefront of two movements on Wall Street, according to Tim Lind, an investment management practice analyst at Needham, Mass.-based TowerGroup.

The first is a push to automate the settlement process to the point where trades can be finalized one day after they're made, also known as T+1. The second is a move to outsource automation to companies like State Street so brokers don't have to pay the cost of automation themselves.

Although State Street launched the system to improve its internal efficiency, Lind says FTM puts the bank in a prime position to fulfill the need for outsourcing and automated trade completion.

Bottom-line payback

Of the trades that are now processed through FTM, less than 20% must be handled manually — which takes more time and incurs costs as a result of the delay of the trade and the staff needed for intervention.

"Even in its early stages, it's showing tremendous business value, even though there are so far no metrics from the operations side of the house," Fiore says. "That it has come off as scheduled and we haven't had problems deploying it has been a tremendous plus for the IT organization."

Lessons learned

Upfront preparation work is never wasted. Even though State Street designed the project to be used in either a centralized or distributed way by business units and prepared for either eventuality, Fiore says more upfront work with the specific business units would have made the rollout even more effective. ◗

Fogarty is a freelance writer in Sudbury, Mass.

HON Industries Inc.

Supply S
Grows Sm

BY **MARC L. SONGINI**

Project objective

The old legacy systems at HON Industries Inc. were unable to accurately measure the capacity of the manufacturer's warehouses. That lack of understanding led to errors like sending more products to a particular facility than it could store. To address the problem, a new system was designed to be more flexible and to take into account more variables, such as the size of the trucks and warehouse dock schedules.

CIO and Vice President Malcolm C. Fields says the optimization system has cut distribution costs, improved the timeliness of shipments and reduced the amount of finished inventory that the manufacturer carries to "unbelievable lows."

The implementation team achieved its results despite considerable obstacles, including a shake-up in company structure and management and resistance from employees who were wedded to traditional processes.

HON Industries began its advance-planning and scheduling system project in October 1999 and wrapped it up in March 2001 at a cost of about $2 million. Though the project ran past its original deadline by six months, it also far exceeded the expectations of the project team, says Fields.

at a **glance**

COMPANY HON Industries Inc.

LOCATION Muscatine, Iowa

WEB www.honindustries.com

PROJECT LEADER Malcolm C. Fields

BUSINESS Manufactures office furniture and gas and wood-burning fireplaces

ANNUAL REVENUE $2 billion

SIZE OF IT DEPARTMENT Approximately 100

BEST
IN CLASS

Technology

The project, which involved replacing legacy distribution mainframe code, used software from SynQuest Inc., a Norcross, Ga.-based maker of supply chain management software. The SynQuest application allows HON to take a product order, factor in shipping and scheduling variables, then decide which factory could build and ship the product for the least amount of money.

Business benefits

What's unique about this sort of a rollout is the focus on logistics and transportation factors, says Steve Banker, an analyst at ARC Advisory Group Inc., a Dedham, Mass.-based consultancy. Similar deployments typically focus on different parts of the supply

ystem arter

chain, such as sourcing or procurement, he says.

Bottom-line payback

Without offering exact numbers, Fields says the new system has contributed to a drop in freight costs from 6.5% to 5.8% as part of the firm's overall sales revenue. Scheduling accuracy has improved by 20%, and there are now 19 inventory turns a year, up from 16, he says.

Lessons learned

One major challenge to the project was the constant shifting of business processes at HON, which meant projects had "to be implemented in short, intensive phases," says Fields.

For instance, during the middle of the rollout, the company was split into two separate divisions, and the president of the original operating company was replaced. The business executives who signed off on the project were gone, says Fields.

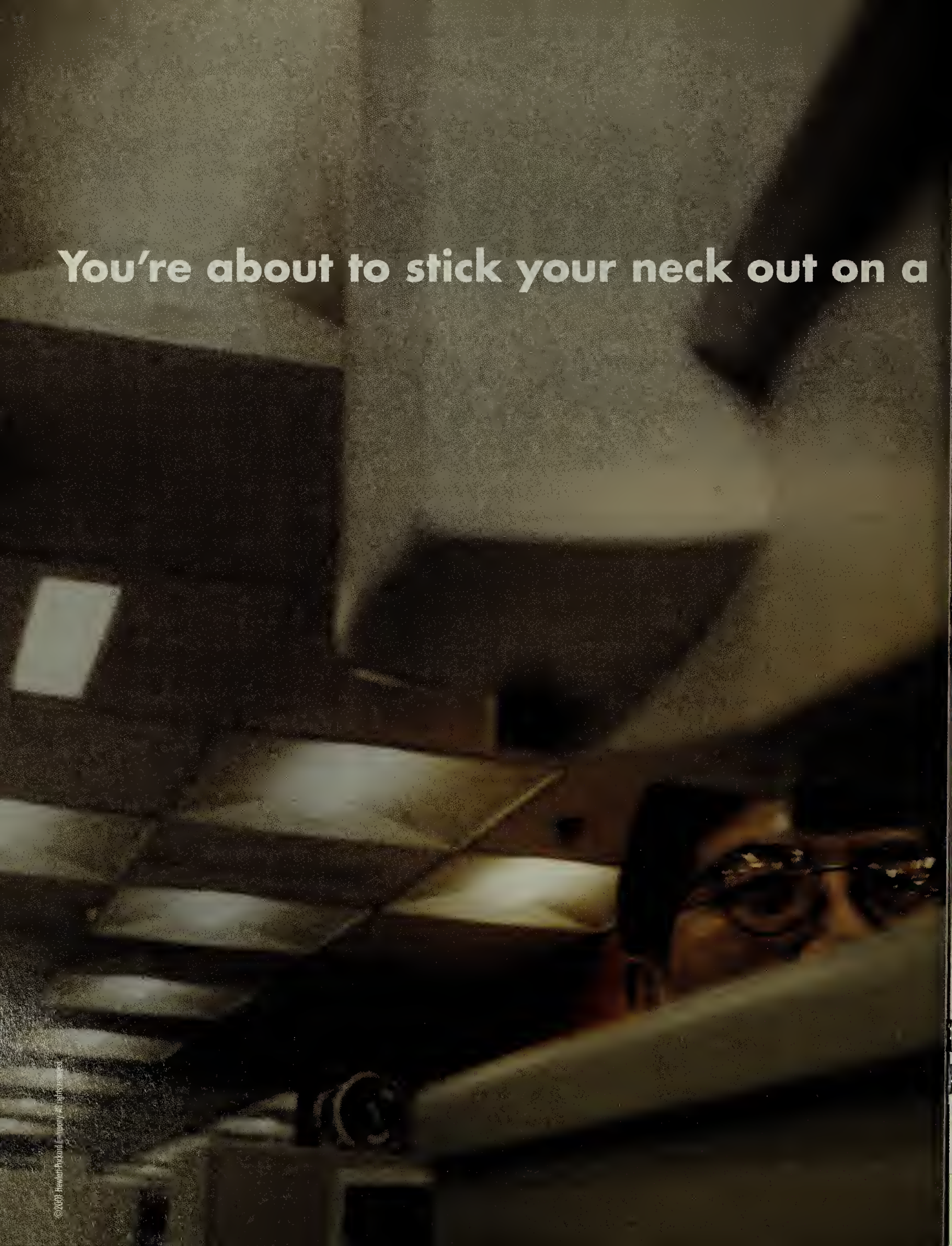
"We had to go out and rewin some hearts and minds," he says. Although work never slowed, for about 30 days the project's fate was uncertain. In the end, project advocates successfully educated the new executive team, and the rollout was a success.

Fields says he learned just how tough it is to persuade people to change their way of thinking. "Never underestimate the difficulty of shifting a paradigm," he says. ◗

MICHAEL KREISER

The optimization system has cut distribution costs, improved the timeliness of shipments and reduced the amount of finished inventory the manufacturer carries to "unbelievable lows."

MALCOLM C. FIELDS (LEFT)


You're about to stick your neck out on a

©2001 Hewlett-Packard Company. All rights reserved.

server decision that will finally update your data center. The problem is, it's hard enough predicting what will happen next quarter, let alone next year. So how can you be confident that the infrastructure choices you make today are choices you can live with tomorrow?

One option now has to include the new HP server rp8400—a rack-optimized breakthrough designed specifically to help you manage the enormous infrastructure demands generated by today's constantly evolving business environment.

It's small enough to fit two to a rack yet provides unprecedented power and flexibility in a mid-range server. In fact, we've made room for up to 16 processors, setting new standards in the category for both performance density and scalability. The kind of power you need to more easily manage and control workload allocation.

Best-in-class dynamic partitioning essentially divides the server into sections, allowing each one to function independently. So even if one application goes down, the other sections of the server continue their jobs unaffected. Which makes it possible to move resources around without having to shut down your entire system, sidestepping costly downtime.

And with the convenience of HP Utility Pricing, processing power and other services can be made available on tap, like electricity. So you can easily and securely scale online without having to invest in expensive hardware or support.

HP infrastructure solutions—servers, software, storage, services and beyond—are engineered for the real world of business. Because the last time we checked, that's where we all work. Call 1.800.HPASKME, ext. 246. Or visit www.hp.com/go/infrastructure.

Infrastructure: it starts with you.

hp®
invent

GFInet Inc.

Online Tool For Trading Opens New Channels

BY **JULEKHA DASH**

Project objective

The trading desk at GFInet Inc. used to operate via data distribution screens that showed tradable prices but didn't allow customers to conduct online transactions. The infrastructure, implemented in the 1980s, was outdated and had limited capabilities, says CIO Russ Lewis.

GFInet's FX Options project was designed to enable online currency trading via a virtual private network or the Internet.

The options market "traditionally trades over the telephone," says Lewis. The FX Options application enabled GFInet, a subsidiary of brokerage services provider GFI Group Inc., to reach new customers and increase transaction volumes by 20% to 30% by offering another sales channel. The system was designed to manage simpler trades, freeing brokers to conduct more complex, high-value transactions.

BEST IN CLASS

COMPANY GFInet Inc.

LOCATION New York

WEB www.gfinet.com

PROJECT LEADER Russ Lewis

BUSINESS Provides online trading services

CLIENT BASE More than 500

SIZE OF IT DEPARTMENT 95

Technology

GFInet now has "a state-of-the-art technology platform" that enables online trading of financial and commodity derivatives, says Lewis. The Java-based system runs on an Oracle Corp. database and uses Los Altos, Calif.-based Talarian Corp.'s SmartSockets for messaging. FX Options is being rolled out to bank trading rooms worldwide and to the firm's internal brokerage desks in New York, London, Tokyo and Sydney.

Business benefits

The FX Options project makes GFInet "more of a one-stop shop" for financial services, says Andrew Koslow, chief operating officer at San Francisco-based brokerage firm The Financial Cafe.com. GFInet is consolidating "different trading technology that you don't typically find among other providers all in one house," says Koslow. What's unique isn't the online currency options capability, but that it's offered along with the company's product suite, he says.

Bottom-line payback

With only a portion of the company's existing client base using the new system, top-line revenue has already increased 20%, according to Lewis.

GFInet plans to eventually measure success in terms of market-share growth, profitability and average billing per broker, he adds. GFInet has gained a significant increase in trading volumes by making it easier for customers to trade with the firm, Lewis says. The electronic trading platform has increased customer interest in GFI products and made customers more confident in the company's technology capabilities, he adds.

Lessons learned

GFInet's FX Options project has shown how first-rate technology can enable a company to grow, says Lewis. The company now sees new opportunities to automate other products and expand offerings as a result of the project's success.

At GFInet, no decisions are made until all the brokers, product managers and business analysts come to an agreement, says Lewis. IT was able to overcome brokers' initial hesitation by continuing to solicit their input throughout the design and testing process.

"We stressed that far from disintermediating brokers, the electronic trading platform would enhance their efficiency and free their time for more complex and more profitable trades," he says. ▶

Dash is a freelance writer in Lewes, Del.

FedEx Corp.

Web Guide Remits Rules Of Shipping

BY **LINDA ROSENCRANCE**

Project objective

It was the late 1990s, and FedEx Corp. customers were clamoring for a quick and easy way to navigate the fast-paced world of international trade.

So Robert B. Carter, executive vice president and CIO at FedEx, assembled a team and set about developing FedEx Global Trade Manager, a free, Web-based guide to international shipping for small and midsize businesses.

"We designed this around the customers' needs," says Karen Rogers, FedEx's vice president of e-commerce marketing, who worked with Carter on the project.

BEST IN CLASS

COMPANY FedEx Corp.

LOCATION Memphis

WEB www.fedex.com

PROJECT LEADER Robert B. Carter

BUSINESS Shipping, transportation, information and logistics company

ANNUAL REVENUE $20 billion

SIZE OF IT DEPARTMENT More than 5,000

The project, which began in 1997 and was launched in August 2000, was finished on time and on budget. It was originally used by customers arranging shipments to or from the U.S., Canada, the U.K., Hong Kong and Puerto Rico. Since then, FedEx has expanded the service to 20 countries.

Technology

FedEx designed its own Web-based system and integrated it into an Oracle Corp. database. The application helps shippers understand global trade regulations and prepare the appropriate import or export forms based on the commodity being shipped and the countries of origin and destination. It also alerts users to restrictions on shipping certain commodities, lets them know if a country is under embargo and provides information on special licensing requirements.

In February, Global Trade Manager began offering shippers a tool for determining government charges and fees for international shipments, including import duty, value-added tax and excise duty, so they can estimate the total landed costs of their packages.

Business benefits

"Global Trade Manager makes it easier to ship internationally, which can be an intimidating experience," Carter says.

"It allows customers to do import/export documentation in a straightforward fashion," he says. "Millions of Web users have access to FedEx.com, and we ship tens of thousands of international packages a day from [the Web site]. We are giving them access to technology they wouldn't otherwise have."

Donald Broughton, a transportation analyst at A.G. Edwards & Sons Inc., a consultancy in St. Louis, says that although FedEx was the first company to offer such a service, other companies, including Atlanta-based United Parcel Service Inc., now have similar tools.

Although Global Trade Manager is offered in only 20 countries, Broughton says the addition of the taxes and duties estimator makes the application more valuable to customers.

Bottom-line payback

Memphis-based FedEx continues to measure the project's success by tracking the increase in the number of customers who use Global Trade Manager as well as the growth of international shipments, Carter says.

Currently, 70,000 registered customers use the services provided, and that number is growing 300% year over year, according to Rogers.

Although Carter won't release the project's financial impact on shareholders, he says it is "among the most profitable at FedEx."

Lessons learned

Technology projects that are laser-focused on customer needs are the ones that win approval from the executive board at FedEx. In fact, because it increased international capabilities and offered payback to customers, the project was well-received throughout the company from the start, Carter says. ◗

E-Procure S
Talks Back in

BY **JAIKUMAR VIJAYAN**

Project objective

Wesco Distribution Inc., a $3.9 billion Pittsburgh-based company, is one of the country's largest distributors of electrical products and other maintenance, repair and operating supplies to large companies. Wesco stocks more than 140,000 items from hundreds of manufacturers. In addition, its customers order more than 900,000 other maintenance, repair and operating items from Wesco that the company doesn't stock.

Until recently, when Wesco sales representatives received orders for such nonstocked items, they had to call the manufacturers directly or check their Web sites for pricing and availability. That information was then relayed back to the customer in a separate phone call. Although orders for nonstocked items account for only 20% of Wesco's business, gathering information on those purchases for customers took 40% of the sales force's time, says Russ Lambert, Wesco's director of e-commerce.

Technology

To address the problem, the company decided to dock its logistics systems with those of its major suppliers. But Wesco had to find a standard way to query and pull information from heterogeneous supplier systems over the Web and into its own 20-year-old, proprietary, green-screen systems. That was the most difficult part of the project, Lambert says.

The company built an Internet gateway with a common set of doorways that created inbound and outbound pathways to the legacy system. XML code was written both to pull data into Wesco's legacy system and to integrate supplier systems with the gateway. Wesco used Austin, Texas-based Vignette Corp.'s content management software and San Jose-based BEA Systems Inc.'s WebLogic application server as its core technologies for the project.

Business benefits

Since the e-procurement system went live in June, Wesco's 1,000 salespeople in 400 locations have been able to directly access the finished-goods inventory systems of major suppliers. Now, while a customer requesting nonstocked items is still on the line, a salesperson can send a query over the Web to the supplier's system with a one-button application, receive an an-

at a **glance**

COMPANY Wesco Distribution Inc.
LOCATION Pittsburgh
WEB www.wescodist.com
PROJECT LEADER Russ Lambert
BUSINESS Distributes electrical products and other maintenance, repair and operating supplies
ANNUAL REVENUE $3.9 billion
SIZE OF IT DEPARTMENT 87

BEST
IN CLASS

System Real Time

LARRY RIPPEL

swer in about 10 seconds and communicate that to the customer.

Bottom-line payback

Wesco's new system has cut phone costs by reducing the duration of each call by at least six minutes. It has also increased sales of nonstocked items and saved an enormous amount of time for salespeople, Lambert says. He estimates that the company could save nearly $12 million annually if the new system saves 1,000 salespeople just three hours per week (at $75 per hour).

"More and more, distributors are moving away from stocking inventory to becoming supplier reps," says Andy Chatha, an analyst at Dedham, Mass.-based ARC Advisory Group Inc. Wesco's e-procurement system provides the visibility into supplier systems that allows distributors to carry less inventory and thereby cut costs, he adds.

Lessons learned

Considering that it has cost about $400,000 to date to implement the system, demonstrating return on investment has been a "slam dunk," says Lambert. The system is also bound to have a positive impact on customer perception, he says. Because of Wesco's system, customers know when they call that they're making a real-time order against in-stock supplies, Lambert says. "It has been a great proof-of-concept about the power of direct linkage in the supply chain," he says. ◗

Considering that it has cost about $400,000 to date to implement the system, demonstrating return on investment has been a "slam dunk."

RUSS LAMBERT (LEFT)

Intranet Idea Box Pays Out Big

BY KATHLEEN MELYMUKA

Project objective

Galactic Ltd. IT Vice President Anthony Okrongly recently harnessed Web technology to automate and scale up the traditional employee suggestion box.

Galactic offers trips, merchandise, gift certificates and other noncash incentive programs that firms can use to reward their employees. It designed the Ideaworks program as a way for its clients' employees to earn rewards by submitting cost-saving or revenue-generating ideas via the Web — an intranet suggestion box that pays off.

The program had to be quick and easy to use and shepherd an idea through its many stages: creation, submission, evaluation, feedback, approval and reward. When the program was tested internally, for example, a Galactic employee showed that having all workers use a single type of pen would save thousands of dollars over time. The company gained the savings, and the employee received points to be redeemed for merchandise. When sold to clients, Ideaworks generates revenue for Galactic through the fulfillment of the incentive awards and administration of the program.

BEST IN CLASS

COMPANY Galactic Ltd.

LOCATION Arlington, Texas

WEB www.galacticmarketing.com

PROJECT LEADER Anthony Okrongly

BUSINESS Purveyor of corporate noncash marketing incentive programs

ANNUAL SALES Approximately $100M

SIZE OF IT DEPARTMENT Nine

Technology

Ideaworks was first piloted internally in the summer of 2000 as a paper-based awards program. In January 2001, Galactic's nine-person IT staff began designing a Web-based version using existing hardware, software and infrastructure. The Web version went live in March for Galactic's own employees to test and use, and development of Version 2 was outsourced to Bryte Software Design in Irving, Texas; dedicated infrastructure resources were installed at Galactic to support it. Version 2 can handle 100,000 registered participants in as many as a dozen separate client programs. By January 2002, the first clients were using Version 2.

The system is hosted on clustered Dell Computer Corp. server technology, with storage-area servers, Cisco Systems Inc. routers and content switches. It uses Cisco's new iSCSI technology as well as Microsoft Corp.'s development and hosting software.

Business benefits

Galactic is the first in its market to offer such a program, says Okrongly. Internal use of Ideaworks at Galactic has increased teamwork and improved communications, and internal savings alone have reached $2.3 million. Revenue from clients is expected to dwarf that amount, he says.

Bottom-line payback

Based on the $2.3 million savings minus development costs of less than $1 million and $180,000 spent on incentive awards, the in-house product alone has generated a return on investment of well over 200%, says Okrongly. Revenue for 2002, with client participation and the ensuing revenue from administration and awards fulfillment, is projected at $20 million to $30 million, for an anticipated ROI of 2,000% to 3,000%, he says.

"This project exemplifies what many small companies will have to do in order to create value for their customers using the Web," says Philip Anderson, professor of entrepreneurship at INSEAD, an international business school in Fountainebleau Cedex, France. Galactic's strength is partly its speed: "The company is moving fast and can pick off some significant customers before competitors show up," Anderson says.

Lessons learned

Starting small, staying on budget and gradually building as the concept proves itself financially eliminates resistance, says Okrongly. He also credits the use of Stamford, Conn.-based Gartner Inc.'s Gartner Institute Project Management model for the project's success. "When the going got tough, it made all the difference," Okrongly says. ◗

Corning Inc.

ERP Plan Cuts Costs At Factories

BY MATHEW SCHWARTZ

Project objective

In the late 1990s, manufacturing operations at Corning Inc.'s display technologies division were aligned with customers on a regional level — for example, the plant in Japan served Japanese customers; the U.S. plant served U.S. customers. But when customers wanted more computer displays than ever, the business model wasn't scaling.

"As we looked at the plan, we learned that our existing model just wasn't cutting it," says Corning CIO and Vice President Richard J. Fishburn.

BEST IN CLASS

COMPANY Corning Inc.

LOCATION Corning, N.Y.

WEB www.corning.com

PROJECT LEADER Richard J. Fishburn

BUSINESS Provider of telecommunications equipment; glass for flat-panel displays, LCD laptop computers, TVs and VCRs; and optical materials for the semiconductor industry

ANNUAL NET SALES $6.3 billion

SIZE OF IT DEPARTMENT 1,100 permanent employees and 50 contractors

In 1999, Corning set about improving supply chain efficiency, but technology was the last aspect discussed. In fact, when brainstorming better models, Corning first asks managers to "listen to what their operational people are saying," says Fishburn. Only then are opportunities defined, followed by business benefits and, finally, mechanisms to determine whether goals were met.

Corning was a pioneer in putting business processes first rather than following the classic enterprise resource planning (ERP) philosophy of making business fit the technology. Jill Jenkins, an analyst at Current Analysis Inc. in Sterling, Va., says the old thinking was, " 'If I optimize one piece and optimize another piece, when I put it together, it will be optimal' — but it wasn't."

Technology

At Corning, the approach was different. In the case of display technologies, "we needed to create the virtual factory," says Fishburn. Display glass is manufactured in two stages: The melting process takes raw silica and produces sheets of glass, and then a finishing line cuts those down to various sizes. Since a melting line costs 10 times as much as a finishing line, Corning decided to keep its melting operations — one in the U.S. and one in Japan — but use its global finishing lines more strategically. Only then was technology assigned to solve the problem: a supply chain module was added to Corning's PeopleSoft Inc. ERP software.

> **"As we looked at the plan, we learned that our existing model just wasn't cutting it."**
>
> RICHARD J. FISHBURN

Business benefits

The project has stayed on schedule and under budget, and is paying for itself, even though the rollout won't be completed until next year, says Fishburn. And the project costs less than a new melting operation. "It used to take us five days to do the planning for tomorrow's production. Now we can do it in an hour," he says.

Bottom-line payback

Improved planning efficiency meant Corning didn't have to build excess capacity. And instead of using whatever inventory is on hand, which creates leftover glass that's expensive to dispose of, it can now manufacture only what's needed, in the most optimal sizes. Also, fewer orders have to be rushed to reach customers on time.

Lessons learned

Fishburn says he knew he had business sponsorship from the beginning. In senior management meetings, for example, one former critic "would very clearly articulate the fact that this was the premier project that exists for this division," he says. "As the CIO, your greatest success is to sit in the background and let your operating peers talk about their projects." ◗

Schwartz is a freelance writer in Arlington, Mass.

A Do-It-You Web Site

BY **MICHAEL MEEHAN**

Project objective

Bob Palmer, vice president of IT at Lenox Collections, a division of Lenox Inc., set out with a team of developers to revamp LenoxCollections.com. Key drivers for the change were the need to reduce the number of clicks in the checkout process, more closely align the site with its other sales channels (namely its catalogs), provide consumers with more information about their purchases and update the site design.

Technology

Palmer says he didn't hit any technical snags with the project because he was confident that his own developers could build the new Web site. While he says he looked at bigger-budget Web portal software from Redwood City, Calif.-based BroadVision Inc. and IBM's WebSphere line, he chose instead to let his team use San Francisco-based Macromedia Inc.'s over-the-counter ColdFusion Web development tools.

"If you have experienced, talented Web developers, and we have, then it's not that difficult to do," Palmer says. "You have to ask yourself, 'Do I want to bring in an army of consultants at $150 or $200 an hour when the organization has very talented Web developers who understand our business and cost less?' "

The project budget was set for $105,000, with almost half of that figure slated for design. The design phase began last March and was completed in mid-May. The development phase took less than three months.

Business benefits

Once the job was finished, Palmer's team took that experience and applied it to other Lenox Web sites. He says that about 70% of the code used on LenoxCollections.com was reusable, allowing his team to put up a site for U.K.-based retailer Brooks & Bentley in less than three months. Palmer says his development team can now quickly implement new features when customers request them. "Now that we've got the basics right, additional features aren't difficult to add," he says.

Bottom-line payback

As for return on investment, Palmer says the work has already paid for itself. LenoxCollections.com saw a 115%

at a glance

COMPANY Lenox Inc.

LOCATION Langhorne, Pa.

WEB www.lenoxcollections.com

PROJECT LEADER Bob Palmer

BUSINESS Maker of china and fine collectibles

ANNUAL REVENUE $550 million

BEST IN CLASS

rself Update

JAMES WASSERMAN

sales increase in the fourth quarter of 2001, compared with the same period in 2000. Much of that was driven by a boosted browser-to-buyer conversion rate, up from 4.5% to more than 8%. And since the site's launch, Lenox has continued to add features, such as order status updates.

"The ROI comes when people use the site more and you complete more sales," Palmer says. "Sometimes you have to be practical and realize you get an ROI by delivering things your customers want."

Lessons learned

Palmer says he learned that Internet projects expose a lot more than just catalog offerings.

"Where you're taking phone orders, there's always been a veil — a human being — between a company's back-end systems and the customer," which has hidden a lot of system deficiencies, he says. "The Web opens up your business processes to the general public, and if those processes and systems aren't consumer-focused and clear, the deficiencies will be exposed to the world."

Palmer says Lenox also had to reestablish who needed to be in the loop when decisions were being made. Lenox needed to better address communication and project goals when members left or joined the development team.

"People need to know not only what they're doing, but why they're doing it and how it fits in with what others are doing," Palmer says. "It's basic stuff, but that's what tripped us up." ◗

"Sometimes you have to be practical and realize you get an ROI by delivering things your customers want."

BOB PALMER (LEFT)

Your people are hounding you

[illegible] All rights reserved.

for more storage space. Your support staff has just been cut. And you've already shot your IT budget for the year. You're not alone. The need for storage is skyrocketing, and more and more businesses are feeling the heat.

The problem is, spending a lot is not an option right now. And while budgets continue to shrink, requirements do not. Leaving you with the responsibility of finding a way to squeeze more efficiency out of the storage resources you already have.

It would help if your infrastructure were flexible enough to let you pull together all your mixed-vendor devices so you could freely move data between them. That way you could scale your existing capacity to match your company's unpredictable storage demands.

HP's answer to the challenge is Federated Storage Area Management (FSAM), an inventive approach that ensures you get the most out of your past, present and future investments. We start by helping you manage your entire network's storage resources—including legacy and multi-vendor hardware—from the convenience of a single console. All without adding more people.

HP infrastructure solutions—servers, software, storage, services and beyond—are engineered for the real world of business. Because the last time we checked, that's where we all work. Call 1.800.HPASKME, ext. 246. Or visit www.hp.com/go/infrastructure.

Infrastructure: it starts with you.

invent

You've been trying to conjure up the magic combination of servers and operating systems that will finally bring together your company's various departments.

Meanwhile, sales is pushing to get the CRM software installed by the end of the quarter. Marketing is screaming for help with the new Web initiative. Manufacturing is late implementing the next phase of the ERP system. And you're stuck there in the middle of the crossfire, glancing around the nerve center of your enterprise, waiting for the inspiration to arrive.

It would help if the servers you were working with were designed for the reality of today's complex business environment.

At HP, we always approach servers from the systems level, taking the extra time to consider how they work with your infrastructure as a whole. That's why we offer a broad range of server solutions that allow you to choose the ideal OS for your needs—from high-end enterprise systems to server appliances to blades.

All come bundled with sophisticated management tools that make it easier for you to manage your infrastructure across multiple operating systems. And as codeveloper of the next-generation multi-OS platform—the Itanium™ architecture—HP is in the unique position to make future upgrade paths a totally seamless experience.

HP infrastructure solutions—servers, software, storage, services and beyond—are engineered for the real world of business. Because the last time we checked, that's where we all work. Call 1.800.HPASKME, ext. 246. Or visit www.hp.com/go/infrastructure.

Infrastructure: it starts with you.

invent

Itanium is a trademark [illegible] 01 Hewlett-Packard Company. All rights reserved.